

# Mango - Czarna Porzeczka IPA

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **16**
- SRM **3.1**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **27 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.3 liter(s)**

## Steps

- Temp **66 C**, Time **50 min**
- Temp **72.8 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **15.8 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **50 min** at **66C**
- Keep mash **20 min** at **72.8C**
- Keep mash **10 min** at **78C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **27 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount         | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Viking Pilsner malt | 3.5 kg (77.8%) | 82 %  | 4   |
| Grain | Płatki owsiane      | 1 kg (22.2%)   | 85 %  | 3   |

## Hops

| Use for | Name              | Amount | Time     | Alpha acid |
|---------|-------------------|--------|----------|------------|
| Dry Hop | Amarillo          | 50 g   | 3 day(s) | 9.5 %      |
| Boil    | Lublin (Lubelski) | 50 g   | 30 min   | 4 %        |

## Yeasts

| Name                        | Type | Form   | Amount  | Laboratory       |
|-----------------------------|------|--------|---------|------------------|
| FM54 Gorączka kalifornijska | Ale  | Liquid | 1000 ml | Fermentum Mobile |

## Extras

| Type   | Name             | Amount | Use for | Time     |
|--------|------------------|--------|---------|----------|
| Flavor | mango            | 1000 g | Primary | 5 day(s) |
| Flavor | porzeczka czarna | 400 g  | Primary | 5 day(s) |